

2. (Twice amended) An isolated nucleic acid molecule comprising at least 700 contiguous nucleotides from the coding region of SEQ ID NO:1, wherein said coding region encodes SEQ ID NO:2.

23. (Twice amended) A method of inhibiting cell growth *in vitro* or *ex vivo*, said method comprising transfecting said cell with a polynucleotide, wherein said polynucleotide is between 8 and 50 nucleotides in length and said between 8 and 50 nucleotides are complementary to a mRNA molecule encoding SEQ ID NO:2, wherein said polynucleotide is not complementary to or identical to contiguous nucleotides between nucleotide 692 and 1385 of SEQ ID NO:1.

28. (Amended) A method of inhibiting the activity of Nogo B in a cell *in vitro* or *ex vivo*, said method comprising treating said cell with an antisense oligonucleotide wherein said antisense oligonucleotide hybridizes with a polynucleotide encoding Nogo B, wherein said polynucleotide is not complementary to or identical to contiguous nucleotides between nucleotide 692 and 1385 of SEQ ID NO:1.

29. (Amended) A method of inhibiting the activity of Nogo B in a cell *in vitro* or *ex vivo*, said method comprising treating said cell with a ribozyme capable of cleaving mRNA encoding said Nogo B, wherein said ribozyme does not cleave mRNA complementary to or identical to nucleotides 692-1385 of SEQ ID NO:1.

#### REMARKS

Applicants submit this Amendment in response to the Office Action mailed September 21, 2001 (Paper No. 12). Claims 1, 2 and 5-29 are pending in the application. Applicants have elected claims 1, 2, 5-10, 23-25, 28, and 29 to be examined at this time. By this Amendment, claims 1, 2, 23, 28 and 29 have been amended as discussed below. No new matter is added.

Applicants acknowledge that any rejections not repeated in Paper No. 12 are withdrawn.

Claims 1 and 5-10 were rejected under 35 U.S.C. § 112, first paragraph, as containing subject matter that allegedly was not described in the specification in such a way as to reasonably convey to one skilled in the art that the inventors had possession of the claimed invention at the time the application was filed. The Examiner stated that the specification does not describe a representative number of sequence variations of SEQ ID NO:1 or 2, nor does it provide data for the tolerance of conserved amino acid changes in SEQ ID NO:2. Although applicants do not acquiesce to the grounds of rejection, claim 1 has been amended herein. Withdrawal of this rejection is respectfully requested.

Claims 23-25, 28 and 29 were rejected under 35 U.S.C. § 112, first paragraph, because the specification allegedly does not reasonably provide enablement for methods of inhibiting cell growth *in vivo* comprising the administration of antisense or ribozymes targeting nucleic acids encoding Nogo B. The Examiner stated that the specification is enabling for methods of inhibiting cell growth *in vitro*. Applicants submit that methods of *ex vivo* treatment are also enabled. Without acquiescing to the ground of rejection, applicants have amended claims 23, 28 and 29 to recite that the cell is treated or transfected *in vitro* or *ex vivo*. See, for example, specification at page 28, lines 20-21, and page 33, line 23 to page 34, line 3. Reconsideration and withdrawal of this rejection are respectfully requested.

Claims 23, 24, 28 and 29 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Bandman et al. and further in view of Milner et al. and James. Without acquiescing to the ground of rejection, applicants have amended claims 23, 28 and 29 to clarify that the antisense oligonucleotides and ribozymes of the claimed methods are directed to regions of the Nogo polynucleotides that do not encompass the polynucleotide region disclosed in Bandman. At page 20, lines 16-20 of the specification, specific reduction of Nogo B protein levels is disclosed. At page 20, lines 20-23 of the specification, the "sequence-specific manner" of binding is emphasized, thereby excluding binding to a sequence that is not specific to Nogo B polynucleotides. Reconsideration and withdrawal of this rejection are respectfully requested.

Claim 2 stands rejected under 35 U.S.C. § 112, second paragraph, as allegedly being indefinite for failing to particularly point out and distinctly claim the subject matter which

applicants regard as the invention. According to the Examiner, the term "coding region of SEQ ID NO:1" is unclear. Applicants have amended claim 2 to recite that the coding region encodes SEQ ID NO:2 (Nogo B protein), as disclosed at page 11, lines 17-18 of the specification. Reconsideration and withdrawal of this rejection are respectfully requested.

Attached hereto is a marked-up version of the changes made to the claims by the current amendment. The attached page is captioned "**Version With Markings to Show Changes Made.**"

All of the claims remaining in the application are now clearly allowable. Favorable consideration and a Notice of Allowance are earnestly solicited.



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PATENT TRADEMARK OFFICE

Respectfully submitted,

Seed Intellectual Property Law Group PLLC

A handwritten signature in black ink, appearing to read "Jane E. R. Potter", written over a horizontal line.

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(JEP:cew) #222407

VERSION WITH MARKINGS TO SHOW CHANGES MADE

In the Claims:

Claims 1, 2, 23, 28 and 29 have been amended as follows:

1. (Twice amended) An isolated nucleic acid molecule comprising a polynucleotide selected from the group consisting of:

(a) a polynucleotide encoding the amino acids from about 1 to about 373 of SEQ ID NO:2;

(b) a polynucleotide encoding the amino acids from about 2 to about 373 of SEQ ID NO:2;

(c) a polynucleotide encoding the amino acids from about 1 to about 197 and about 236 to about 373 of SEQ ID NO:2, wherein said amino acids about 197 and about 236 are joined by a peptide bond;

(d) a polynucleotide encoding the amino acids from about 1 to about 288 and about 336 to about 373 of SEQ ID NO:2, wherein said amino acids about 288 and about 336 are joined by a peptide bond;

(e) a polynucleotide encoding the amino acids from about 1 to about 197, amino acids about 236 to about 288, and amino acids about 336 to about 373 of SEQ ID NO:2, wherein said amino acids about 197 and about 236 are joined by a peptide bond, and said amino acids about 288 and about 336 are joined by a peptide bond;

(f) a polynucleotide encoding the amino acids from about 1 to about 187 of SEQ ID NO:2;

(g) a polynucleotide encoding the amino acids from about 2 to about 187 of SEQ ID NO:2;

(h) a polynucleotide encoding the amino acids from about 1 to about 198 of SEQ ID NO:2;

(i) the polynucleotide deposited as ATCC Accession No. PTA 89; and

~~(j) a polynucleotide at least 80% identical to any one of the polynucleotides of (a)-(i);~~

(j)(4) the polynucleotide complement of the polynucleotide of any one of the polynucleotides of (a)-(i).

2. (Twice amended) An isolated nucleic acid molecule comprising at least 700 contiguous nucleotides from the coding region of SEQ ID NO:1, wherein said coding region encodes SEQ ID NO:2.

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28. (Amended) A method of inhibiting the activity of Nogo B in a cell in vitro or ex vivo, said method comprising treating said cell with an antisense oligonucleotide wherein said antisense oligonucleotide hybridizes with a polynucleotide encoding Nogo B, wherein said polynucleotide is not complementary to or identical to contiguous nucleotides between nucleotide 692 and 1385 of SEQ ID NO:1.

29. (Amended) A method of inhibiting the activity of Nogo B in a cell in vitro or ex vivo, said method comprising treating said cell with a ribozyme capable of cleaving mRNA encoding said Nogo B, wherein said ribozyme does not cleave mRNA complementary to or identical to nucleotides 692-1385 of SEQ ID NO:1.

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